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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,423	07/13/2004	Johannes Jacobus Franciscus Geijtenbeek	NL 020024	9929
24737	7590	01/23/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			HO, BINH VAN	
P.O. BOX 3001			ART UNIT	
BRIARCLIFF MANOR, NY 10510			PAPER NUMBER	
			2821	

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/501,423	GEIJTENBEEK ET AL.	
	Examiner	Art Unit	
	Binh V. Ho	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) 6-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/13/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/19/2005</u> .                                                          | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 6-15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 6-15 have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-5, and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

5. The term "specifically" in claim 1 is a relative term which renders the claim indefinite. The term "specifically" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

6. The term "aspect ratio" in claim 1 is a relative term which renders the claim indefinite. The term "aspect ratio" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree,

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and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

7. Claim 1 ("with aspect ratio greater than 3 or even 4") is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Because it is not clear whether the ratio is 3, 3.1, 3.2, ...or 4 or 5 or 6, or 10 etc... the term "aspect" is vague because it does not specify what kind of ratio is (etc. diameter, length, width, power, current, voltage ... etc)

8. Regarding claim 5, "order of 0 –5 mm" is vague because "order" does not provide any meaning to the distance.

#### **Claim Rejections - 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-2, are rejected under 35 U.S.C. 102(b) as being anticipated by Geijtenbeek (6,147,453).

(Claim 1)

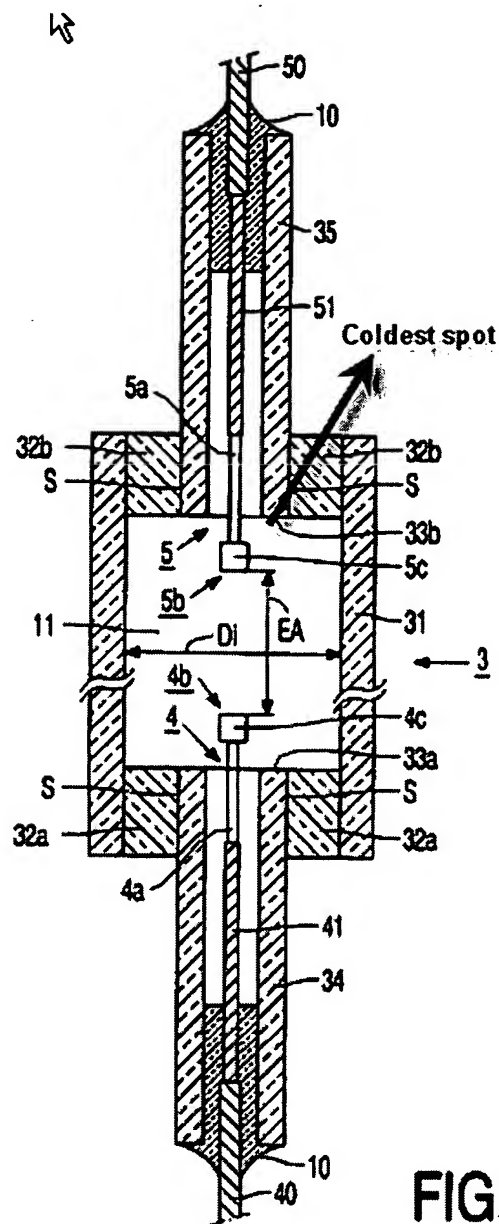
Geijtenbeek discloses gas discharge lamp, specifically a HID lamp, more specifically a metal halide lamp, most specifically a metal halide lamp with an aspect ratio greater than 3 or even 4 (col. 4, lines 55 +), comprising a discharge chamber (11) having walls sealingly enclosing the discharge chamber; two

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electrodes (4,5) arranged in the discharge chamber opposite each other, for burning an arc therebetween; the discharge chamber containing a saturated system comprising an excess amount of salt (col. 3, lines 9 +), such as for instance metal halides, such that during operation of the lamp, a salt pool of melted salt will be present inside the discharge chamber (11); the lamp being designed such that, when the lamp is operative in a vertical orientation, the location of the salt pool is close to the top of the discharge chamber.

(Claim 2)

Geijtenbeek discloses in figure below, the coldest spot being close to the top of the discharge chamber (coldest spot which is the top of the chamber is inherently the farthest distance from the electrode because it conducts and absorb the least heat generated from radiation).



11. Claims 1-2, are rejected under 35 U.S.C. 102(b) as being anticipated by Graham (5,083,059).

(Claim 1)

Graham discloses in figure 1, gas discharge lamp, specifically a HID lamp, more specifically a metal halide lamp, most specifically a metal halide lamp with

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an aspect ratio greater than 3 or even 4, comprising a discharge chamber (16) having walls sealingly enclosing the discharge chamber; two electrodes (30,32) arranged in the discharge chamber opposite each other, for burning an arc therebetween; the discharge chamber containing a saturated system comprising an excess amount of salt (col.5, lines 16 +), such as for instance metal halides, such that during operation of the lamp, a salt pool of melted salt will be present inside the discharge chamber; the lamp being designed such that, when the lamp is operative in a vertical orientation (Figures 1-3), the location of the salt pool is close to the top of the discharge chamber.

(Claim 2)

Graham discloses in figure below, the coldest spot being close to the top of the discharge chamber (coldest spot which is the top of the chamber is inherently the farthest distance from the electrode because it conducts and absorb the least heat generated from radiation).

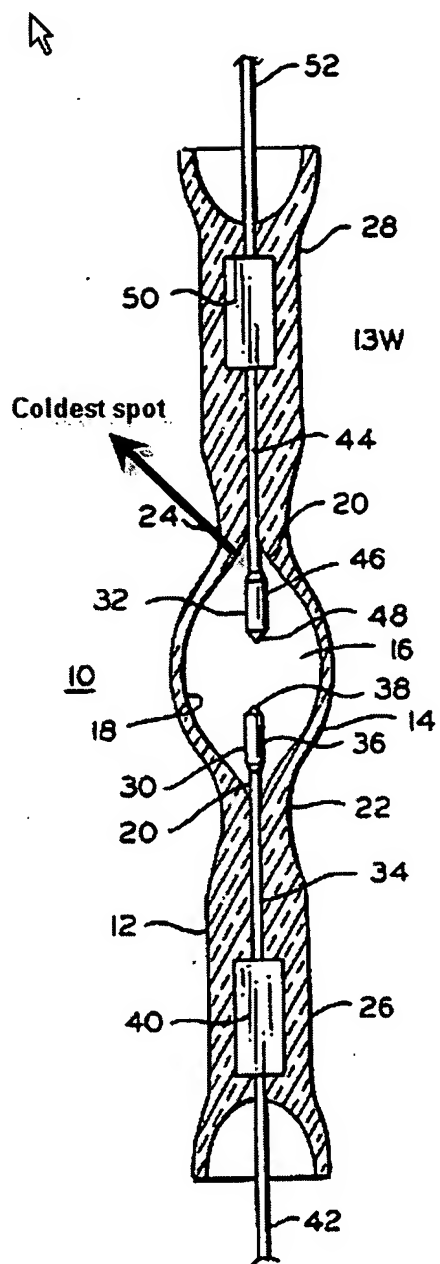


FIG. 1

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Alderman (6,844,676).

(Claim 1)

Alderman discloses gas discharge lamp, specifically a HID lamp (Figures 1,4-7) more specifically a metal halide lamp, most specifically a metal halide lamp with an aspect ratio greater than 3 (col.1, lines 50 +) or even 4, comprising a discharge chamber having walls sealingly enclosing the discharge chamber (Figure 1, col. 1. lines 7 +); two electrodes (30,40) arranged in the discharge chamber opposite each other, for burning an arc therebetween; the discharge chamber containing a saturated system comprising an excess amount of salt (col.7, lines 44 +), such as for instance metal halides, such that during operation of the lamp, a salt pool of melted salt will be present inside the discharge chamber; the lamp being designed such that, when the lamp is operative in a vertical orientation (col.2, lines1-3), the location of the salt pool is close to the top of the discharge chamber.

(Claim 3)

Alderman discloses in figures 2A-2B, the lamp is designed such that, when the lamp is operative in a vertical orientation (col., lines 5 +), an arc heats

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(col., lines 43 +) the ceiling of the discharge chamber to a lesser extent than the bottom or lower cap of the discharge chamber.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geijtenbeek (6,147,453) in view of Kawashima (6,294,870).

(Claims 4)

Geijtenbeek discloses substantially all of the elements, except the lower electrode has a point-to-bottom distance that is smaller than the point-to-bottom distance of the upper electrode. Kawashima teaches in figure 5, the lower electrode (22) shorter than upper electrode (23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the lower electrode shorter than upper electrode in vertical position lamp as show by Kawashima in Geijtenbeek, in order to reduce the heat at the top compare at the bottom of the lamp.

(Claims 5)

Geijtenbeek discloses that the lower electrode has a point-to-bottom distance in the order of 0-5 mm (col.20, lines 31 +).

(Claim 20)

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Geijtenbeek discloses that the lamp is provided with additional heat generating means located close to one end of the discharge chamber.

(Claim 21)

Geijtenbeek discloses that the additional heat generating means comprises a radiation coil (col. 18, lines 27 +).

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geijtenbeek (6,147,453) in view of Liebe (4,621,216).

(Claim 22)

Geijtenbeek or Graham discloses substantially all of the elements, except a pair of electrically conductive lamp supports supporting the lamp and supplying power to the lamp, wherein the radiation coil is also powered by the said lamp supports. Liebe discloses a pair of electrically conductive lamp supports supporting the lamp and radiation coil (Figures 1-3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a pair of electrically conductive lamp supports shown by Liebe to support the radiation coil in Geijtenbeek in order to start up the lamp faster.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art of record to French (US 4,808,876) discloses a metal halide lamp.

Prior art of record to Lapatovich (US 5,113,121) discloses a electrodeless HID lamp with lamp capsule.

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Prior art of record to Kowalczyk (US 5,525,863) discloses a hid lamp having an arc tube with offset press seals.

### **Inquiry**

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh V. Ho whose telephone number is 571 272 8583. The examiner can normally be reached on M-F from 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Binh V Ho  
Examiner  
Art Unit 2821

Binh Van Ho  
01/18/2006



**WILSON LEE**  
PRIMARY EXAMINER